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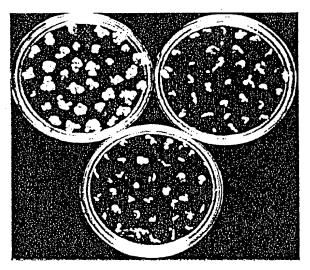
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Fig. 1A

Ws rat5



F1 (Ws x *rat5*)

1040

1200 1280

1120

1440 1520 1600

1360

800 960 640 720 880 480 560 240 320 400 160 TGAATTAGCTGGAAACGCAGCAAGAGACAACAAGAAGACACGTATTGTTCCTCGTCACATTCAGCTTGÇGGTCAGAAACG TGGGTŢGTTGTTGAAAA*TGGCTGGTCGTGGAAAAACTCTTGGATCCGGTGGGCCGAAGAAAGCTACATCTCGGAGTA* GGTGCTCCGGTTTATCTCGCCCCCTTCTCGAATATTTGGCCGCCGAGGTAAAATTACATCGTCTTTTCTCTTTTCCCCA  ${ t CAATITGATITGAGITTTICAAATITTGGAAAGITTTGATCATGAATTGTGTGTTTTGAATTTGTGTTTCAGGITTCAGGITTCT$ A TGAGGAGCTAAGCAAGCTTCTTGGAGATGTGACGATTGCTAATGGAGGAGTGATGCCTAACATCCACAATCTCCTTCTTC *CCTAAGAAGGCTGGTGCTTCAAAGCCTCAGGAAGAT*TAGGTCTTTTAACACAATGATATAGAACACGTCTCTTTTGCA TTTTT<u>CAGGATATATTGTGGTGTAAACAAATTGACGCTTAGACAACTTAATAACACATTGCGGACGTTTTTAATGTACTG</u> <u>AAATTTGGAAATTCCCTCGTCCAGAAGAAACCAACAAAAAACTGCAAAAGTTCAAGCGGTGGGAGAAAAAAATTCAGATC</u> TCCTCCACATATATAACAACAATCAGATTTCTCTCTGTTAATTTCGTCAAGAAAAAAATTCGATTTTTTGCGCTCTTTG GCAAAGCCGGTCTTCAATTCCCGGTGGGTCGTATCGCTCGTTTCTTAAAAGCCGGTAAATACGCCGAACGTGTTGGTGCC TTCCGTTTCCGATCTTATTCGTCTGACTCTGTTTTTGCGTGATCGATTACGAATCTAGGGTTCTTACATTTTCCGAATTT GTAATTCATCAAATTTATATATAGTGATAAAATTCCACAATGGTTGTTCAATAAAAATATGAACAACACAATAGAATTAGTA AAAGTGACTATGTTAAATCATTTTCTTCGCTGGGGTTTTGGTGGGCGAGTTCTAAACCCATAAGCGGCCCATTTACTTCGT GTAGCCATTCATTAAATTATAATCAACGGTTTAAACCTCTTCGATCCGCGTACTCTATTCCTTATGGTCAAATAACTTAA TTGCCCTAAAACCTAAAACCAACAGGACCATCATTTCGACCACACCACATTGACTGGTCTGCCCCAATCTAGCTATGATA TATCTTAATTTCCGTATGACTTGGATCCATAAATATTGAAATAGATTTGGTGAACACAAAATTACTCTTAAAACTTCTTCT TCAAAAGGAAAGACATTAAATTAGAAATTGAATTTTGAAACATGTTGATAGATCATGTCCTTCTTCTGGGTTACCCAGTT

- Open reading frame Italics-

Bold-

▶T-DNA LB sequence Underline –

nsertion site

Fig. 1c

3/8	7	2	1		
6.6 kb	FC. PI	4/n d III	RB	2.3Kb	
		ECORI Hind III Sa/I Sa/I EcoRI Sa/I Hind III   EcoRI Hind III Sa/I Sa/I EcoRI Sa/I Hind III	PBR322 Tn Tn5 PBR322 RB	3.7kb 1.2kb 2.3kb 4.3kb 2.3kb	6.0 Kb
6.6Kb	7.2Kb	/] <i>Eco</i>	Th5	2.3kb	9
		/I Sa 	703	1.2K	ſ
		HindIII Sa	pBR322	3.7Kb	٩
	7.2Kb — EcoRI	$\left \frac{\mathcal{E}coRI}{\left }\right $	LB		9.7Kb
		52 <i>Hind</i> III 	RB	2.3Kb	
		RI Sa/I .	pBR322 RB	3.0kb 3.7kb 1.2kb 2.3kb 4.3kb 2.3kb 3.0kb	6.0Kb
		Sa/  Eco	Th Th 5	2Kb 2.3Kb	9
		HindIII Sa/1	pBR322 Tn Tn5	3.7kb 1.	
	Fro RI	EcoRI	LB	3.0Kb	13.3 Kb
	FCO	5a/I 520	Plant DNA		P

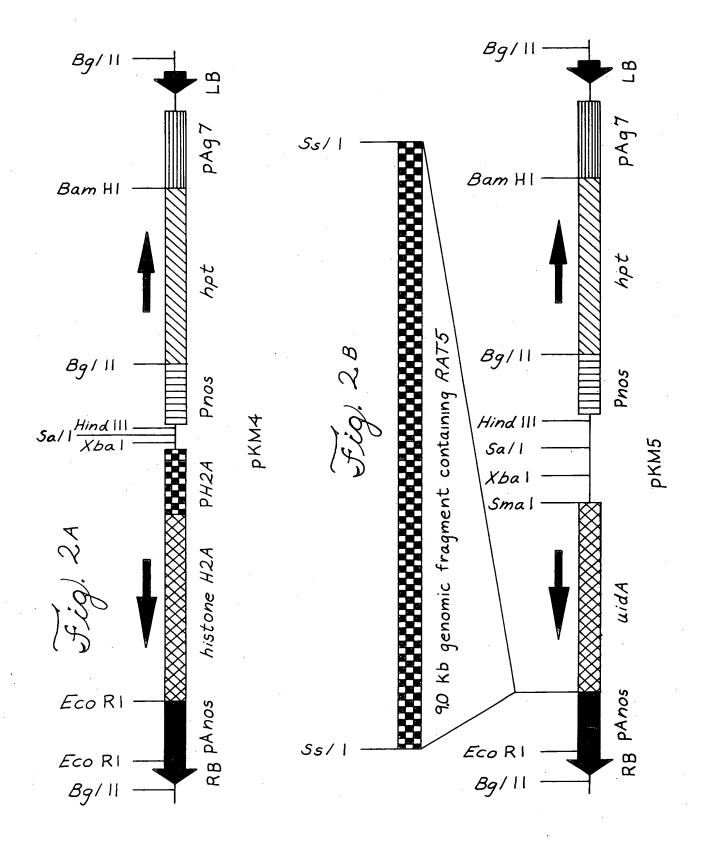
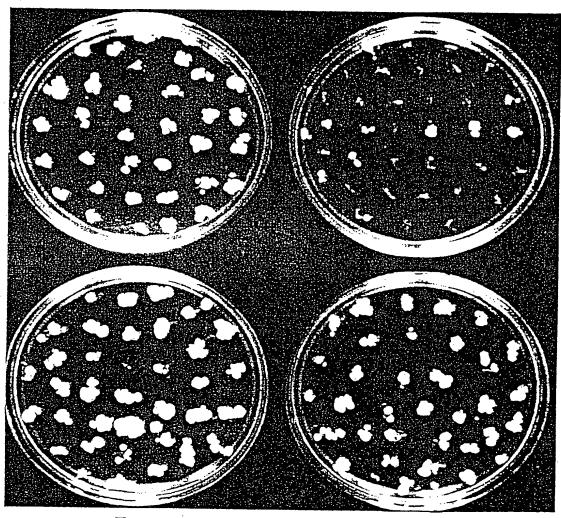


Fig. 2c

Ws

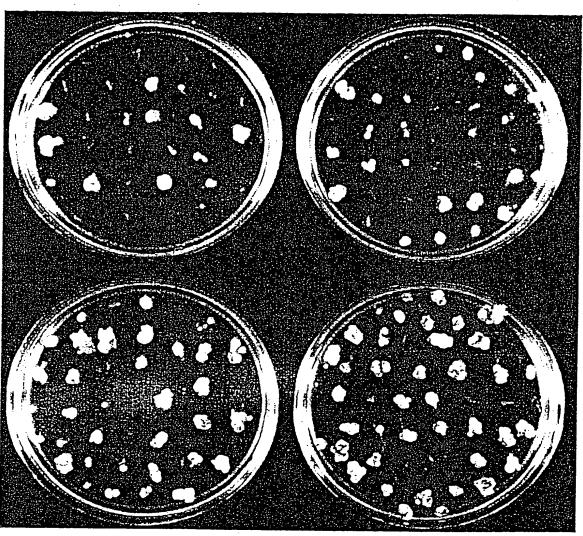
rat5



Transgenic *rat5* plants expressing the *RAT5* histone H2A gene

Fig. 2.D
Ws

Ws



Transgenic Ws plants overexpressing the RAT5 histone H2A gene

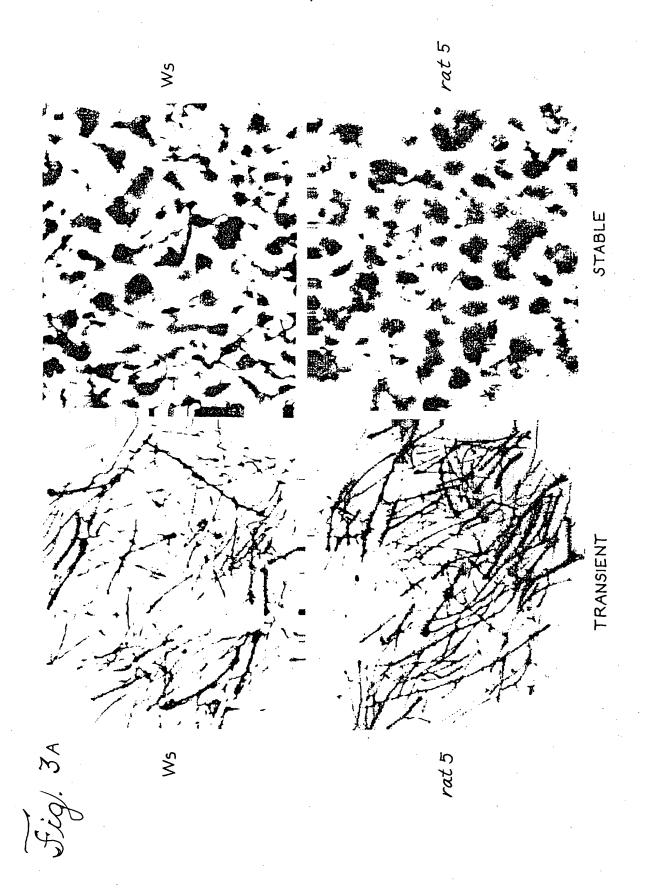
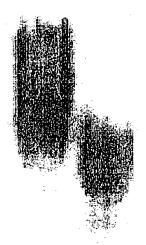


Fig). 3B

rat5 Ws

rat5 Ws

23 kbp



gusA Gene

PAL Gene